

XP-002221825

AN - 1992-405865 [49]

AP - SU19894761397 19891121

CPY - MINK

DC - D16 E16 G04 Q49

DR - 0113-U 0123-U 1066-P 1713-P

FS - CPI;GMPI

IC - E21F5/06

IN - NEDOSEKINA N M; STEKOLSHCHIKOV G G; VOROSHILOV S P

MC - D05-A02C E10-A13B E10-E04H G04-B06

M3 - [01] K0 L4 L432 M280 M320 M416 M620 M782 M903 M904 M910 Q232 Q337 Q441;
R00123-M; 9240-7

- [02] H4 H403 H483 H8 M280 M313 M321 M332 M343 M383 M391 M416 M620 M782
M903 M904 M910 Q232 Q337 Q441; R00113-M; 9240-7

PA - (MINK) E SECT MINE SAFETY RES INST

PN - SU1701940 A1 19911230 DW199249 E21F5/06 003pp

PR - SU19894761397 19891121

XA - C1992-180353

XIC - E21F-005/06

XP - N1992-309363

AB - SU1701940 The compsn. contains (in wt.%): urea 76.6-88.8, glycerine 5.0-6.0, urease (suspended in glycerine) 0.5-2.0 and water 3.2-17.9.

The presence of urease in the compsn. results in a reaction of decomposition of urea at normal temp. 17-20 deg.C (compared to above 70 deg.C for the known compsn. contg. no enzyme). Urea decomposes with generation of ammonia and carbon dioxide, reducing sorption activity of coal w.r.t. oxygen. Urease content as above allows regulation of ammonia generation rate within range 0.05 x 10 power -6 to 0.12 x 10 power -6 cu.m/h and urea decomposition rate within range 0.32 x 10 power -12 to 0.70 x 10 power -12 m/s. Total amt. of generated inert gases is 0.90-1.01 cu.m per 1 kg of urea.

- The compsn. neutralises atmos. within worked out shaft from the moment of its introduction and remains stable during whole period of work. Urea decomposition rate can be controlled according to requirements by changing the concn. of urease within range 0.2-0.5 wt.%.

- USE/ADVANTAGE - In mining industry, as a compsn. preventing self-ignition of coal in worked-out pits and also during conducting coal cutting works. The compsn. has increased efficiency and provides stable working atmos. neutralising effect of ambient temp. 17-20 deg.C and higher. Bul.48/30.12.9(Dwg.0/0)

CN - R00123-M R00113-M

DRL - 9240-7

IW - COMPOSITION PREVENT ENDOGENOUS FIRE WORK SHAFT CONTAIN UREA GLYCEROL UREASE WATER

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INW - NEDOSEKINA N M; STEKOLSHCHIKOV G G; VOROSHILOV S P

NC - 001

OPD - 1989-11-21

ORD - 1991-12-30

PAW - (MINK) E SECT MINE SAFETY RES INST

compsn. preventing endogenic fires in worked-out shafts - contains

urea, glycerine, urease and water